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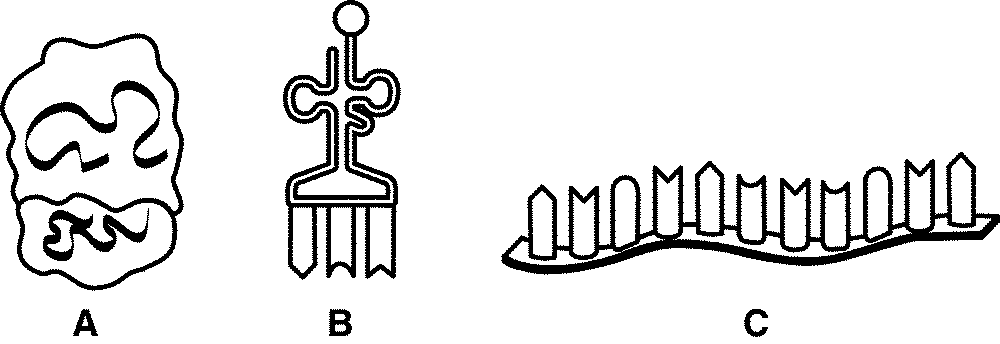
**RNA & PROTEIN SYNTHESIS TEST – STUDY GUIDE**

1. Unlike DNA, RNA contains \_\_\_\_\_\_.

2. How are DNA and RNA similar?

3. If a nucleic acid contains uracil, it is \_\_\_\_.

4. RNA is \_\_\_\_\_ stranded.



5. In the figure above, A, B, and C are three types of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. This type of RNA transfers the amino acids to the growing protein chain.

7. This type of RNA makes up the ribosomes.

8. This type of RNA carries the message from DNA for the making of proteins.

9. The set of 3 consecutive nitrogen bases found on the mRNA is the \_\_\_\_\_.

10. The set of 3 consecutive bases found on the tRNA which is complementary to the mRNA strand is the.

11. The enzyme that binds to DNA during transcription is \_\_\_\_\_.

12. How many strands of DNA are used to make mRNA?

13. How many possible codons are there?

14. How many amino acids are there?

15. Which codon is the “start” codon?

16. \_\_\_\_\_ carries the code to make proteins.

17. RNA does not have the nitrogen base \_\_\_\_.

18. The type of RNA that is made from transcription is \_\_\_\_.

19. \_\_\_\_ is the process where a piece of DNA is copied into mRNA.

20. \_\_\_ is the enzyme responsible for transcription.

21. \_\_\_ is responsible for bring the amino acid to a growing protein.

22. \_\_\_\_\_ makes up the ribosomes.

23. In RNA, G goes with C and \_\_\_ goes with A.

24. \_\_\_ carries the message from DNA to make proteins.

25. The 3 letter “code” for an amino acid is called a \_\_\_\_.

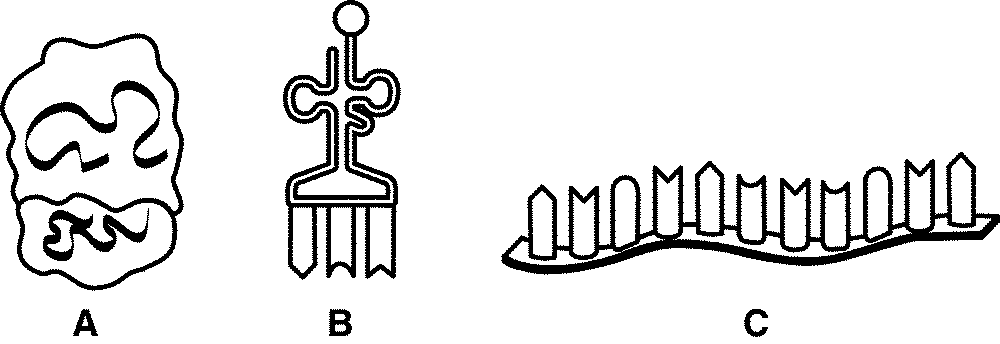
26. The process where the mRNA is “decoded” into protein is called \_\_\_\_.

27. What type of bond is formed between amino acids as proteins are made?

28. The 3 consecutive bases on a tRNA which is complimentary to the mRNA is the \_\_\_.

29. In translation, the start codon AUG codes of the amino acid \_\_\_\_\_.

30. Translation takes place in the \_\_\_\_ of a cell.



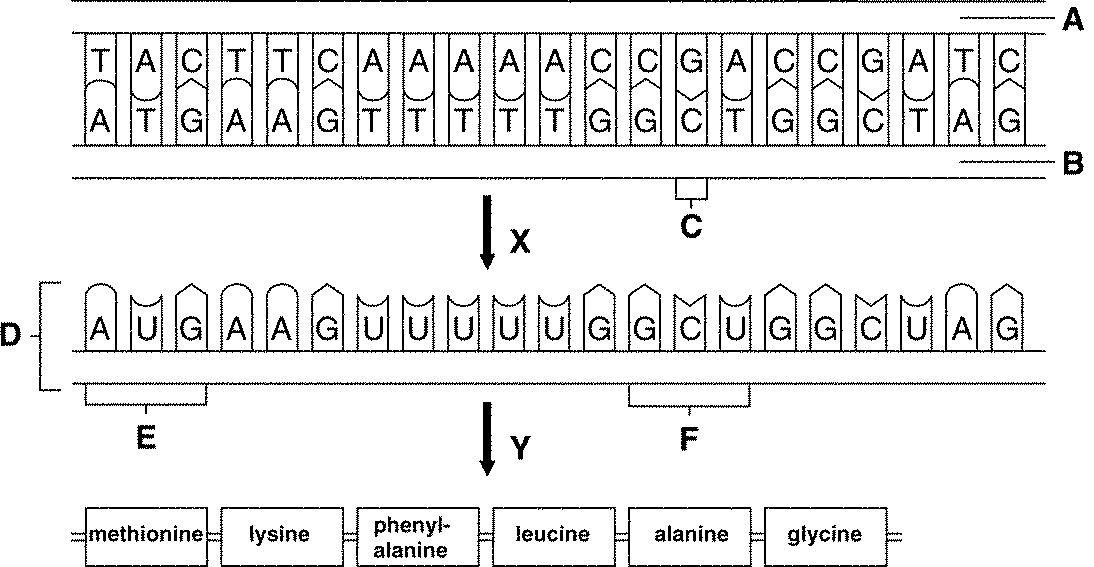
**Figure 12-3**

31. What is the molecule B in Figure 12-3?

32. Compare and contrast the structures of DNA and RNA.

33. Briefly describe the role of each type of RNA in protein synthesis.

34. What are the parts of an RNA nucelotide?



**FIGURE 12-4**

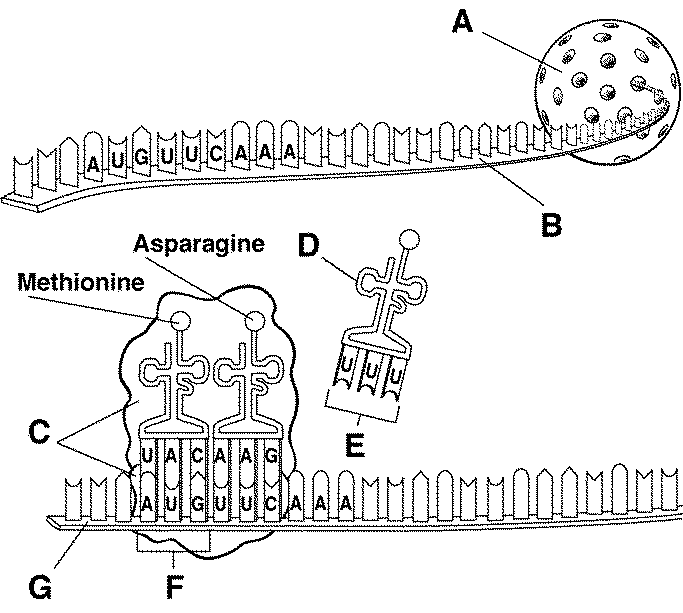
35. What is structure A&B in Figure 12–4? Identify that labeled structure.

36. What structure F in Figure 12–4?

37. What is structure E in Figure 12–4?

38. What would happen to structure F in Figure 12–4 if structure C were deleted?

39. What process does structure X represent in Figure 12-4?



**FIGURE 12-5**

40. What process is being showin Figure 12-5 above.

41. Identify structure D in Figure 12–5.

42. What is structure G in Figure 12–5 is a codon?

43. What is structure A in Figure 12-5?

44. What is structure E in Figure 12-5?